

Title (en)
Rechargeable power pack.

Title (de)
Wiederaufladbare Stromversorgungseinheit.

Title (fr)
Bloc d'alimentation rechargeable.

Publication
EP 0545132 A1 19930609 (EN)

Application
EP 92119562 A 19921116

Priority
• US 79312291 A 19911118
• US 88747992 A 19920522

Abstract (en)
A rechargeable power pack (31) is shaped and dimensioned to be inserted in the battery compartment of an electrical device. The top (32) of the power pack is exactly symmetrical with the battery compartment cover which it replaces. The power pack has a peripheral wall (36) spaced apart from the sides of the battery compartment mounting the battery contact terminals. Flexible prongs (45, 46) project from the peripheral walls (36) to provide a wiping contact with either a spiral spring negative terminal or a stationary positive terminal. A top mounted connector (52) allows recharging of the power pack either during or after operation of the electrical device. An alternate embodiment combines a set of NiCad rechargeable batteries and a cover assembly including an additional battery station to compensate for lower rated voltage of NiCad power cells, a recharging connector and associated current limiting circuit, and a flexible conductor with terminals specially adapted for insertion between the battery poles and the corresponding terminals. <IMAGE>

IPC 1-7
H01M 2/10; H02J 7/00

IPC 8 full level
H01M 50/50 (2021.01)

CPC (source: EP KR US)
H01M 10/4257 (2013.01 - KR); **H01M 50/213** (2021.01 - EP US); **H01M 50/50** (2021.01 - EP KR US); **H01R 13/2421** (2013.01 - KR); **H02J 7/0029** (2013.01 - KR); **H01M 10/30** (2013.01 - KR); **H01M 2200/00** (2013.01 - KR); **H01M 2220/30** (2013.01 - KR); **Y02E 60/10** (2013.01 - EP KR)

Citation (search report)
• [A] WO 9016088 A1 19901227 - GRID SYSTEMS CORP [US]
• [A] US 4389469 A 19830621 - NICHOLLS BRYAN F [GB]
• [A] US 4161568 A 19790717 - LUND JOHN [US]
• [A] US 4558270 A 19851210 - LIAUTAUD JAMES P [US], et al

Cited by
US6075341A; GB2365481A; GB2365481B; US6581315B2; US6965214B2; US6621246B2; US6525511B2

Designated contracting state (EPC)
AT BE CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0545132 A1 19930609; EP 0545132 B1 19960214; AT E134278 T1 19960215; AU 2838792 A 19930603; AU 653080 B2 19940915; AU 672306 B2 19960926; AU 6756194 A 19940922; CA 2082907 A1 19930519; CA 2082907 C 19980421; DE 69208336 D1 19960328; DE 69208336 T2 19960912; HK 6297 A 19970124; JP 2588817 B2 19970312; JP H05251068 A 19930928; KR 930011326 A 19930624; KR 960006424 B1 19960515; NZ 245056 A 19970727; US 5192904 A 19930309

DOCDB simple family (application)
EP 92119562 A 19921116; AT 92119562 T 19921116; AU 2838792 A 19921113; AU 6756194 A 19940719; CA 2082907 A 19921113; DE 69208336 T 19921116; HK 6297 A 19970116; JP 30675592 A 19921117; KR 920021593 A 19921117; NZ 24505692 A 19921109; US 88747992 A 19920522